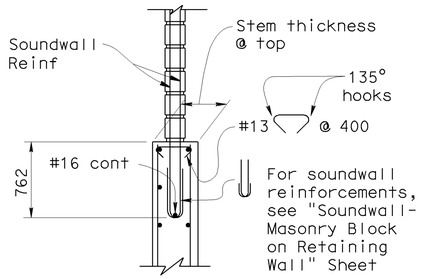
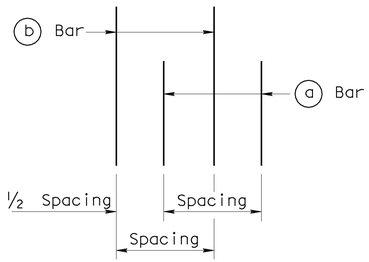
RELEASED 7-17-03



DETAIL A

No Scale



REBAR SPACING

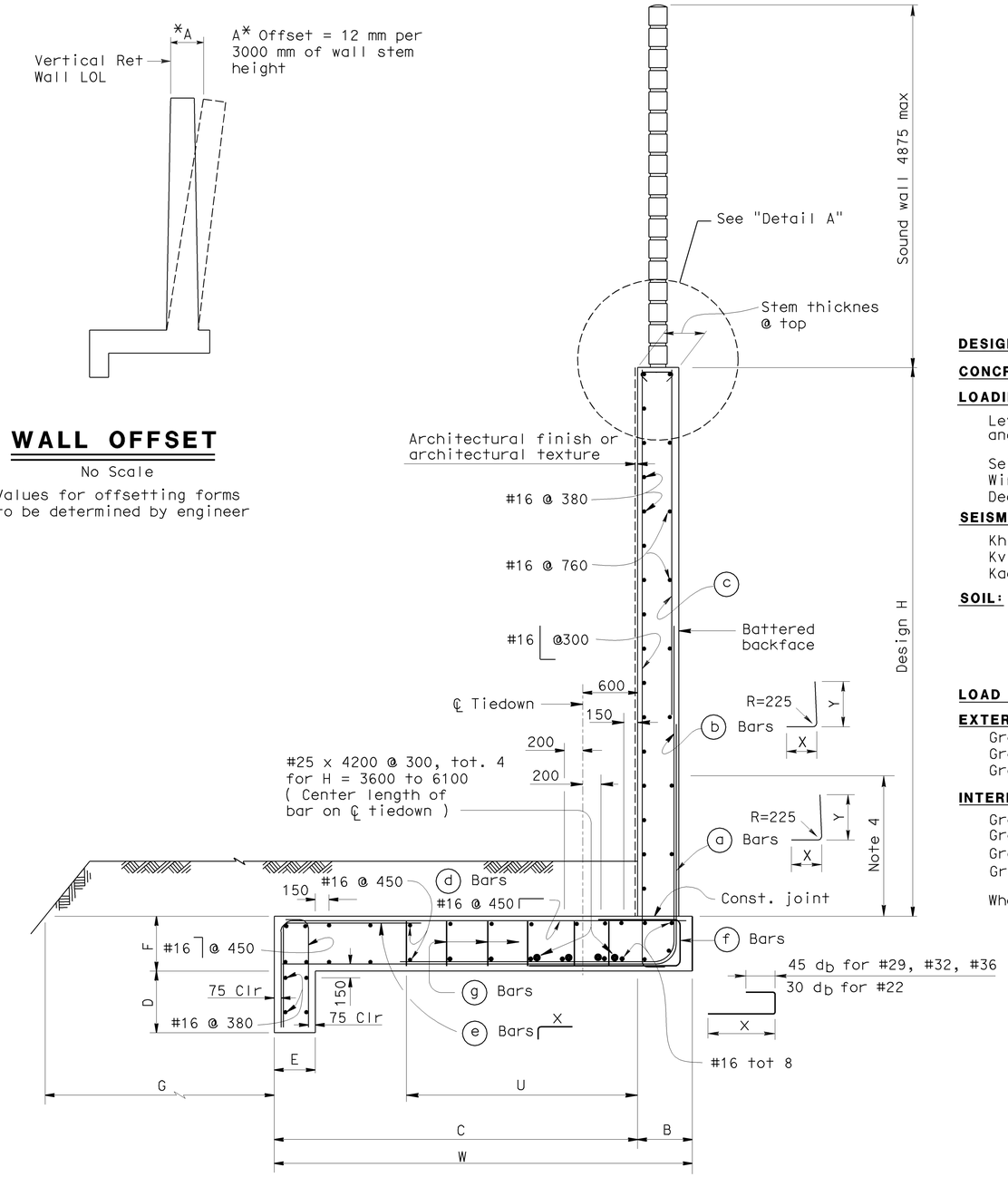
No Scale

A* Offset = 12 mm per 3000 mm of wall stem height

WALL OFFSET

No Scale

Values for offsetting forms to be determined by engineer



SPREAD FOOTING SECTION

No Scale

GENERAL NOTES

1. For soundwall and retaining wall architectural finish or texture, see details elsewhere in project plans.
2. For details not shown and drainage notes, see B3-8
3. Footing coverage, 600 mm minimum.
4. Limit of no splicing rebars = H/3 .
5. Increasing stem thickness not permitted.
6. Place footing key concrete against undisturbed material.
7. Shift (a) bars, (b) bars, and (c) bars as required to clear formed hole for tiedown.
8. No reinforcements in footing key for H=2400 to H=3600.
9. Maximum distance from ℄ tiedown to edge of footing = 0.4(S).

DESIGN DATA

DESIGN: Load Factor Design (LFD)

CONCRETE: Reinforced Concrete, f'c = 25 MPa
fy = 420 MPA

LOADING CASE:

Level ground with 11.5 KPa live load surcharge and 4875 mm Soundwall

Seismic Load = 0.3 Dead Load
Wind Load = 1435 Pa
Dead Load of Soundwall = 20.6 kN/m

SEISMIC LOAD: SOIL

Kh = 0.3g
Kv = 0.0
Kae : Mononobe-Okabe Method

SOIL: $\emptyset$ = 34° γ = 19 kN/m³
Equivalent fluid pressure:
STATIC = 5.6 KPa/m for determination of toe pressure
SEISMIC = Coulomb's Theory

LOAD COMBINATIONS:

EXTERNAL STABILITY:

Group 1 : D + E + SC + 0.75T (F.S. Sliding > 1.5)
Group 2 : D + E + SC + W + 0.75T (F.S. Sliding > 1.2)
Group 3 : D + PYM + P_{av} + V + 1.0 T (F.S. Sliding > 1.0)

INTERNAL STABILITY: (LFD)

Group A : βD + 1.7 E + 1.7 SC + 0.75 T
Group B : βD + 1.7 E + 1.3 W + 0.75 T
Group C :(Stem) 1.0 D + 1.0 E + 1.0 EQD + 1.0 EQE
Group C :(Footing) D + PYM + P_{av} + V + 1.0 T

Where : β = 1.0 or 1.3 whichever controls design
D = Dead Load
E = Lateral Earth Pressure
P_{av} = Vertical Earth Pressure
SC = Live Load Surcharge
W = Wind Load
EQD = Seismic Dead Load
EQE = Seismic Lateral Earth Pressure
PYM = Probable Yield Moment (1.3 x Nominal Yield Moment of Stem)
V = Possible Shear at Base of Stem associated with Probable Yield Moment
T = Design Force for Vertical Tiedown

Caltrans Metric

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED ENGINEER - CIVIL

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

STANDARD DRAWING				
FILE NO. xs14-380-1	DESIGN BY Madon Sah	CHECKED Lisa Tanaka	APPROVAL RECOMMENDED BY	
DRAWING DATE 9/94	DETAILS BY Bing Fok	CHECKED Overcomer Hor		
	SUBMITTED BY Overcomer Hor		DESIGN SUPERVISOR	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
STRUCTURE DESIGN

BRIDGE NO.
KILOMETER POST

RETAINING WALL TYPE 7SW - DETAIL NO. 1

DS OSD 2147A (METRIC) (REV. X/XX/XX)

ORIGINAL SCALE IN MILLIMETERS FOR REDUCED PLANS 0 10 20 30 40 50 60 70 80 90 100

CU
EA

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES (PRELIMINARY STAGE ONLY)

SHEET OF

USERNAME => slee
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xs14-380-1.dgn

DATE PLOTTED => 06-OCT-2003 TIME PLOTTED => 11:00